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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C12N 15/82, 15/52, 9/00, 5/10, G01N 33/50, C12Q 1/68		A3	(11) International Publication Number: WO 00/28053
			(43) International Publication Date: 18 May 2000 (18.05.00)
(21) International Application Number: PCT/US99/25950		(81) Designated States: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 4 November 1999 (04.11.99)		Published With international search report.	
(30) Priority Data: 60/107,275 5 November 1998 (05.11.98) US		(88) Date of publication of the international search report: 17 August 2000 (17.08.00)	
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(74) Agent: FEULNER, Gregory, J.; E.I. du Pont de Nemours and Company, Legal Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US).			
(54) Title: PLANT GLUTAMINE AMIDOTRANSFERASE HOMOLOGS			
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541		598	
(57) Abstract			
This invention relates to an isolated nucleic acid fragment encoding a histidine biosynthetic enzyme. The invention also relates to the construction of a chimeric gene encoding all or a portion of the histidine biosynthetic enzyme, in sense or antisense orientation, wherein expression of the chimeric gene results in production of altered levels of the histidine biosynthetic enzyme in a transformed host cell.			

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Int'l. Application No.
PCT/US 99/25950

Form PCT/ISA/210 (second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 99/25950

G.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	DATABASE EMBEST21 'Online! EMBL Heidelberg, Germany AC/ID AW066760, 18 October 1999 (1999-10-18) WALBOT V: "Maize ESTs from various cDNA libraries sequenced at Stanford University" XP002136029 abstract	1,3-8, 11, 13-15, 17,19,20
P,X	DATABASE EMBEST14 'Online! EMBL Heidelberg, Germany AC/ID AI899863, 28 July 1999 (1999-07-28) SHOEMAKER R ET AL.: "Glycine max cDNA clone similar to: glutamine amidotransferase/cyclase" XP002136030 abstract	1,3-8, 11, 13-15, 17,19,20
P,X	DATABASE NEW_TREMBL 'Online! EMBL Heidelberg, Germany AC/ID CAB36536, 17 June 1999 (1999-06-17) BEVAN M ET AL.: "Glutamine amidotransferase/cyclase" XP002136028 abstract	10

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/25950

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☒ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No. PCT/ US 99 /25950

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: (1-23 partially)

An isolated polynucleotide encoding glutamine amidotransferase from *impatiens* as set forth in SEQ ID NO: 1, a chimeric gene, a host cell, a virus, a polypeptide as set forth in SEQ ID NO: 2, a method of selecting an isolated polynucleotide, a method of obtaining a nucleic acid, a method for evaluating an inhibitory compound, a compositions, an expression cassette, a method for positive selection comprising said polynucleotide.

2. Claims: (1-23 partially)

same as invention 1 but comprising a corn glutamine amidotransferase as set forth in SEQ ID NO: 3-8

3. Claims: (1-23 partially)

same as invention 1 but comprising a rice glutamine amidotransferase as set forth in SEQ ID NO: 9 and 10.

4- Claims: (1-23 partially)

same as invention 1 but comprising a soybean glutamine aminotransferase as set forth in SEQ ID NO: 11-14.

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